

Teachers' Perceptions of The Challenges and Impacts of Utilizing Artificial Intelligence (AI) in English Language Teaching

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Abstrak

Penelitian ini mengeksplorasi persepsi dan pengalaman hidup guru bahasa Inggris dalam memanfaatkan Kecerdasan Buatan (AI) di SMPN 1 Mojowarno, sebuah sekolah negeri di wilayah pedesaan Jombang. Dengan pendekatan fenomenologi hermeneutik Max van Manen dan kerangka Technological Pedagogical Content Knowledge (TPACK), data dikumpulkan melalui wawancara semi-terstruktur terhadap empat orang guru. Temuan menunjukkan adanya tegangan dalam persepsi guru terhadap AI. Di satu sisi, mereka mengakui manfaat AI seperti ChatGPT dan Canva dalam meningkatkan efisiensi dan inovasi pembelajaran. Namun, di sisi lain, mereka menyuarakan kekhawatiran terhadap dampak negatif AI, seperti terganggunya relasi manusiawi, meningkatnya ketergantungan siswa, berkurangnya daya kritis, dan ancaman terhadap eksistensi profesi guru. Respons emosional guru berkembang dari rasa penasaran menjadi sikap waspada dan tanggung jawab etis yang lebih besar. Perjalanan ini diperumit oleh tantangan signifikan, seperti keterbatasan infrastruktur, kesenjangan kompetensi digital, dan ketidaksesuaian konten AI dengan budaya lokal. Akibatnya, guru terdorong memainkan peran baru yang menuntut: sebagai "sutradara" yang harus mengarahkan teknologi, dan "penjaga" yang melindungi ruang pedagogis. Salah satu guru bahkan memilih menolak AI demi menjaga fokus pada pendidikan karakter. Studi ini menyimpulkan bahwa tanpa dukungan sistemik, beban integrasi AI yang efektif ditanggung sendiri oleh guru. Upaya mereka menyeimbangkan inovasi dan integritas pedagogis mencerminkan perjuangan profesional dalam menghadapi medan teknologi dan etika yang semakin kompleks.

Kata Kunci: Kecerdasan Buatan, Pengajaran Bahasa Inggris, Persepsi Guru, TPACK, Van Manen, Pendidikan Pedesaan

Abstract

This study explores English teachers' perceptions and lived experiences in utilizing Artificial Intelligence (AI) tools at SMPN 1 Mojowarno, a rural junior high school in Jombang. Guided by Max van Manen's hermeneutic phenomenology and the TPACK framework, this study used semi-structured interviews with four English teachers to uncover the essence of their experiences. Findings reveal a significant tension in teachers' perceptions. While they acknowledged AI tools like ChatGPT and Canva could enhance learning efficiency and innovation, they also harboured deep concerns over AI's potential to disrupt human relationships, foster student dependency, and erode critical thinking, alongside fears of professional devaluation. Teachers' emotional responses were not static, evolving over time from initial curiosity to a more profound sense of caution and responsibility. This evolution was driven by significant challenges. Beyond technical issues like unstable infrastructure and gaps in digital competency due to limited training, teachers grappled with the inappropriateness of some AI content for their local cultural context. These pressures ultimately forced them into burdensome new roles as "directors" who must constantly control technology, and "guardians" who must defend the pedagogical space. This was most evident in one teacher's complete rejection of AI to prioritize character education and human relationships. The study concludes that without systemic support, the burden of ensuring effective AI integration falls heavily on individual teachers. Their struggle to balance innovation with pedagogical integrity highlights that they are being left to navigate complex technological and ethical terrains alone, a challenge stretching their professional capacity to its limits.

Keywords: Artificial Intelligence, English Language Teaching, Teacher Perception, TPACK, Van Manen, Rural Education

INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) has profoundly reshaped contemporary educational landscapes, including the field of English as a Foreign Language (EFL) instruction. AI-powered tools such as automated writing assistants, intelligent tutoring systems, grammar checkers, and generative content platforms are increasingly promoted as solutions to enhance efficiency, creativity, and personalization in teaching and learning processes (Alqahtani & Wafula, 2025; An et al., 2023). Within EFL contexts, these technologies are often celebrated for their capacity to support language production, provide instant feedback, and reduce teachers' administrative workload. As a result, AI is frequently framed in policy and scholarly discourse as a catalyst for pedagogical innovation and instructional transformation.

In Indonesia, the rise of AI in education coincides with the implementation of the Merdeka Curriculum, a national reform that emphasizes student-centered learning, differentiation, creativity, and teacher autonomy. The curriculum positions teachers not merely as transmitters of knowledge but as designers of meaningful learning experiences who must respond flexibly to students' diverse needs. In this context, AI is implicitly framed as a supportive instrument that can assist teachers in fulfilling the curriculum's ambitious demands. However, this optimistic narrative often assumes ideal conditions of infrastructure, digital literacy, and institutional support—assumptions that do not always hold true, particularly in rural and under-resourced schools.

Despite the growing body of literature on AI in education, much of the existing research remains technocentric, focusing primarily on measurable outcomes, system performance, or students' achievement and motivation (An et al., 2023; C. Zhai et al., 2024). Recent studies also indicate that teachers' readiness and pedagogical orientation, rather than access to tools, determine the sustainability of AI integration, particularly in non-urban contexts (Chuyen & Vinh, 2025). While such studies are valuable, they frequently marginalize the perspectives of teachers as lived, embodied subjects who must negotiate AI use within complex pedagogical, ethical, cultural, and emotional realities. Teachers are not passive recipients of technological innovation; rather, they function as decision-makers, ethical gatekeepers, and cultural mediators who determine whether, how, and to what extent AI is integrated into classroom practice (Luckin et al., 2016; Mishra & Koehler, 2006).

This gap becomes even more pronounced in rural educational contexts, where infrastructural limitations,

uneven digital access, and strong local cultural values intersect with technological change. Research in the Indonesian context has highlighted persistent challenges related to unstable internet connectivity, limited access to devices, and superficial professional training, all of which complicate the integration of digital technologies in schools outside urban centers (Sumakul, 2022). Moreover, Indonesian education is deeply rooted in cultural values emphasizing *adab*—manners, respect, moral character, and relational harmony—which shape teachers' pedagogical priorities and ethical considerations (Sumakul, 2022). These values may not always align seamlessly with AI-generated content that is often global, standardized, and culturally detached.

SMPN 1 Mojowarno, a rural junior high school in Jombang, East Java, provides a particularly compelling site to explore these tensions. Teachers in this setting encounter AI amid limited infrastructure, heterogeneous student abilities, and a strong commitment to character education. Preliminary observations indicate that while some AI tools—such as ChatGPT, Canva, and Gamma—offer practical benefits, their use also raises concerns regarding student dependency, erosion of critical thinking, ethical misuse, and the potential dehumanization of teacher–student relationships. These concerns resonate with broader critiques of AI in education that warn against uncritical adoption and highlight risks related to plagiarism, superficial learning, and moral disengagement (Mohamed, 2024).

Understanding teachers' perceptions in such contexts requires an approach that goes beyond surface-level evaluation of effectiveness. It calls for an inquiry into how teachers experience AI, how their perceptions evolve over time, and how they make meaning of technological change within their professional lives. For this reason, this study adopts Max van Manen's hermeneutic phenomenology, which prioritizes depth of understanding over breadth and seeks to uncover the meanings embedded in lived experience (Van Manen, 1990, 2016). Phenomenology is particularly suited to exploring AI integration because the phenomenon is not merely technical but deeply experiential—affecting teachers' lived body (emotions and stress), lived time (workload and temporal pressure), lived space (classroom and infrastructural realities), and lived relation (teacher–student and teacher–technology relationships).

To complement this interpretive lens, the study also employs the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006). TPACK provides a conceptual tool for analyzing how teachers integrate technology with pedagogy and content knowledge. However, rather than treating TPACK as a linear or purely technical model, this study

positions it as a dynamic and context-sensitive framework that interacts with teachers' values, beliefs, and cultural knowledge. In doing so, the study responds to calls for more nuanced and human-centered analyses of technology integration that recognize teachers' professional judgment and ethical agency (C. Zhai et al., 2024; X. Zhai, 2025).

Accordingly, this study seeks to address two research questions:

- 1) How do English teachers perceive the impacts of AI integration in English language teaching?
- 2) What challenges do teachers face in integrating AI tools into their classroom practices?

By foregrounding teachers' voices and lived experiences in a rural Indonesian context, this study aims to contribute to the growing discourse on AI in education by shifting the focus from technological potential to pedagogical meaning. It argues that effective and ethical AI integration cannot be reduced to access or efficiency alone; rather, it depends on teachers' capacity to interpret, adapt, and humanize technology in ways that honor local values, relational integrity, and the moral purposes of education.

This study contributes to the literature on Artificial Intelligence (AI) in English language teaching in three significant ways. First, it foregrounds teachers' lived experiences as the primary focus of inquiry, shifting attention away from outcome-driven or technocentric perspectives toward how teachers interpret, experience, and negotiate AI use in their everyday professional practice through a hermeneutic phenomenological approach. Second, the study extends the TPACK framework by demonstrating that AI integration does not necessarily follow a linear progression from Technological Knowledge (TK) to full TPACK mastery.

Instead, teachers' decisions are strongly mediated by pedagogical values, ethical concerns, and local cultural norms, particularly the Javanese principle of *adab*. In several cases, pedagogical maturity is reflected not in increased technology use, but in teachers' deliberate limitation or selective use of AI, a dimension of TPACK that remains underrepresented in prior research. Third, situated in a rural Indonesian junior high school, this study contributes context-sensitive insights from a setting that is rarely foregrounded in AI-in-education research. Within the discussion, these findings are interpreted as illustrating a process of pedagogical alchemy, where teachers actively filter and reinterpret generic AI outputs to align with local values and classroom realities, highlighting teacher agency as central to meaningful AI integration.

Given that teachers' engagements with AI are deeply shaped by values, emotions, and contextual realities, this

study requires a research approach that prioritizes meaning-making over measurement. Rather than evaluating the effectiveness of AI tools or generating generalizable claims, the study seeks to understand how English teachers make sense of AI integration within their specific professional, cultural, and institutional contexts. This aim aligns closely with hermeneutic phenomenology, which focuses on interpreting lived experience as a source of meaning (Van Manen, 1990, 2016).

Accordingly, this study adopts a qualitative hermeneutic phenomenological design, using van Manen's existential dimensions—lived body, lived time, lived space, and lived relation—to interpret teachers' experiences with AI. The TPACK framework is employed as an interpretive lens rather than a prescriptive model, enabling analysis of how teachers negotiate the intersections of technology, pedagogy, content, and context. The following section details the research design, participants, data collection procedures, and analytical strategies employed in this study.

METHODS

This study employed a qualitative hermeneutic phenomenological design to explore English teachers' lived experiences in integrating Artificial Intelligence (AI) into English language teaching. Rather than examining the effectiveness or measurable outcomes of AI tools, the study sought to understand how teachers experience, interpret, and negotiate the presence of AI within their professional, cultural, and institutional contexts.

Hermeneutic phenomenology, as articulated by (Van Manen, 1990, 2016), was considered particularly appropriate because the phenomenon under investigation—teachers' engagement with AI—is deeply value-laden, emotionally charged, and context-dependent. AI integration is not merely a technical practice but an experience that reshapes teachers' sense of time, professional identity, pedagogical responsibility, and relationships with students. Consequently, this study prioritised meaning, interpretation, and reflection over generalisation or prediction.

In line with phenomenological principles, the researcher did not seek to bracket interpretation entirely, but instead engaged reflexively with participants' narratives to co-construct meaning. The focus was therefore on what AI means for teachers, how it is lived in everyday classroom practice, and how it is negotiated within a rural Indonesian school context.

The study was conducted at SMPN 1 Mojowarno, a public junior high school located in a rural area of Jombang, East Java, Indonesia. The school operates

within the framework of the Merdeka Curriculum, which emphasizes student-centered learning, pedagogical flexibility, and teacher autonomy. However, this curricular aspiration exists alongside structural constraints typical of rural schools, including uneven internet connectivity, limited access to digital devices, and heterogeneous student digital literacy.

Culturally, the school community is strongly influenced by Javanese values, particularly the principle of *adab*—emphasizing manners, respect, moral conduct, and relational harmony. This cultural context plays a significant role in shaping teachers' pedagogical decisions and ethical considerations, especially in relation to AI tools that often produce globally oriented or culturally detached content. These contextual characteristics make SMPN 1 Mojowarno a meaningful site for examining AI integration as a situated and culturally mediated practice.

Participants consisted of four English teachers from SMPN 1 Mojowarno, selected through purposive sampling. Selection criteria included: (1) active involvement in English teaching, (2) exposure to or experience with AI-related tools (e.g., ChatGPT, Canva, Grammarly, Google Translate), and (3) willingness to reflect on their pedagogical experiences. The participants represented diverse teaching experiences, levels of digital confidence, and orientations toward AI use, ranging from enthusiastic adoption to cautious limitation.

To ensure confidentiality and ethical protection, all participants were anonymized and referred to as Teacher A, Teacher B, Teacher C, and Teacher D. The small number of participants aligns with phenomenological research traditions, which prioritise depth of understanding over breadth, allowing for rich, nuanced exploration of lived experience rather than statistical representation.

Data were collected through in-depth semi-structured interviews, which enabled participants to articulate their experiences, emotions, reflections, and dilemmas related to AI integration in their own terms. Each participant took part in one to two interview sessions, with interview durations ranging from approximately 45 to 75 minutes. Interviews were conducted primarily in Bahasa Indonesia, allowing participants to express nuanced meanings comfortably, and were audio-recorded with informed consent. The interview format provided sufficient flexibility for probing unexpected themes while maintaining alignment with the research questions. Each interview focused on teachers'; initial emotional responses to AI, perceived pedagogical benefits and risks, experiences of using or limiting AI in classroom practice, ethical and cultural considerations, and professional challenges related to infrastructure and training.

Interviews were conducted in Indonesian to ensure participants' comfort and expressive depth, and were audio-recorded with consent. The conversational nature of the interviews enabled participants to reflect on concrete classroom incidents, thereby grounding the data in authentic teaching experiences rather than abstract opinions.

Ethical considerations were strictly observed, including voluntary participation, informed consent, confidentiality, and the right to withdraw at any stage of the research process.

Data analysis followed an interpretive hermeneutic phenomenological approach, guided by van Manen's four existential dimensions: lived body, lived time, lived space, and lived relation. These dimensions were used as sensitising concepts rather than rigid coding categories, allowing themes to emerge organically while maintaining analytical coherence. The analysis proceeded through multiple iterative stages:

- 1) Holistic reading of interview transcripts to grasp overall meanings.
- 2) Selective reading, identifying significant statements that illuminated teachers' lived experiences with AI.
- 3) Thematic interpretation, where recurring meanings were clustered into phenomenological themes.

To strengthen analytical rigor, the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) was employed as an interpretive lens, not as a prescriptive or evaluative model. TPACK was used to examine how teachers negotiated the intersections of technology, pedagogy, content, and context in their narratives, including moments of integration, tension, limitation, or resistance. This combined analytical strategy enabled a nuanced understanding of AI integration as both a pedagogical practice and a deeply human, context-sensitive experience.

Importantly, TPACK was not applied linearly. Teachers' choices—including limiting or rejecting AI—were interpreted as expressions of pedagogical judgment rather than deficits in technological competence. This interpretive use of TPACK allowed the study to capture the complex, non-linear nature of AI integration in real classroom settings.

To ensure trustworthiness, the study applied strategies consistent with qualitative rigor, including prolonged engagement with the data, thick description, and reflexive interpretation. Direct quotations were used extensively to preserve participants' voices and to ground interpretations in empirical narratives.

Ethical considerations were carefully observed. Participants were informed of the study's purpose, and informed consent was obtained prior to data collection. Pseudonyms were used to protect participants' identities, and all data were treated confidentially. The researcher remained attentive to power dynamics, particularly given the reflective and interpretive nature of phenomenological inquiry.

This study does not aim to generalise findings across contexts. Instead, it offers transferable insights into how teachers in similar rural, culturally grounded settings may experience AI integration. By prioritising lived experience and pedagogical meaning, the methodology supports a nuanced understanding of AI as a human, ethical, and contextual phenomenon, rather than a purely technological intervention.

RESULTS AND DISCUSSION

This section presents an integrated account of results and discussion derived from semi-structured, in-depth interviews with four English teachers at SMPN 1 Mojowarno. Guided by hermeneutic phenomenology, the analysis foregrounds teachers' lived experiences and meanings in integrating Artificial Intelligence (AI) into English language teaching. Empirical findings are presented thematically and interpreted dialogically through Van Manen's existential dimensions—lived body, lived time, lived space, and lived relation—while analytically anchored in the Technological Pedagogical Content Knowledge (TPACK) framework.

AI as a Tool for Learning Efficiency and Pedagogical Innovation (Lived Body & Lived Time | TPACK: TK–TPK)

Teachers at SMPN 1 Mojowarno consistently perceived Artificial Intelligence (AI) as a pedagogical tool that significantly enhanced instructional efficiency and opened new possibilities for innovation in English language teaching. AI-assisted platforms such as ChatGPT, Canva, and Gamma AI PPT were described as reducing the burden of time-consuming preparation tasks, particularly in material development, assessment design, and visual media creation. Teacher A articulated this shift clearly:

“Kalau dulu bikin soal atau materi bisa berjam-jam, sekarang dengan ChatGPT atau Gamma itu hitungan menit. Saya jadi nggak stres dan punya waktu lebih buat ngobrol sama siswa.”

From a phenomenological perspective, this experience reflects a profound transformation of lived time (van Manen, 1990). Time, previously experienced as oppressive and scarce due to administrative and

instructional demands, became more flexible and manageable. The “time saved” through AI use was not perceived as idle time, but rather as pedagogically meaningful time that could be reinvested in student interaction—an important demand of the Merdeka Curriculum, which emphasizes differentiated and student-centered learning.

This finding aligns with An et al. (2023), who highlight AI's role in reducing teachers' administrative workload, though the present study extends this by showing how efficiency is reinvested into relational pedagogy rather than mere task completion.

This temporal relief was closely intertwined with teachers' lived body. Teachers reported reduced cognitive fatigue and emotional strain during lesson preparation. Teacher C described this embodied experience succinctly:

“Saving time, saving energy. Jadi saya bisa fokus ke bagaimana anak-anak memahami materi, bukan capek di persiapan.”

Such statements indicate that AI integration was not merely a technical efficiency but an embodied experience of relief, where teachers felt physically and emotionally more present in the classroom. This finding aligns with previous studies highlighting AI's role in reducing teachers' administrative workload (An et al., 2023; Alqahtani & Wafula, 2024), but the phenomenological lens reveals a deeper layer: efficiency is experienced as existential liberation rather than simple productivity.

Beyond efficiency, AI also functioned as a catalyst for pedagogical creativity. Teachers did not passively adopt AI-generated outputs; instead, they used them as starting points for instructional design. Teacher B explained how AI stimulated ideas that were later pedagogically refined:

“Kadang ide dari ChatGPT itu nggak kepikiran sebelumnya. Tapi tetap saya sesuaikan, lalu saya kembangkan jadi worksheet pakai Canva biar cocok sama kemampuan anak-anak.”

This practice illustrates the development of Technological Pedagogical Knowledge (TPK) within the TPACK framework (Mishra & Koehler, 2006). Teachers' Technological Knowledge (TK)—their ability to operate AI tools—enabled them to explore new pedagogical strategies, but innovation only emerged when this TK was consciously aligned with pedagogical intentions and student needs. In this sense, efficiency was not the final goal of AI use, but a gateway that allowed teachers to redesign learning experiences in ways that were previously constrained by time and energy limitations.

Importantly, this finding also reveals that innovation was shaped by contextual demands rather than technological enthusiasm alone. The Merdeka

Curriculum's emphasis on creativity, project-based learning, and student engagement acted as a pedagogical pressure that encouraged teachers to repurpose AI tools for instructional design. Thus, AI-supported efficiency became meaningful only when it strengthened pedagogical interaction and relational presence, reaffirming that technology served teaching—not the other way around.

Emotional Responses and the Evolution of Teachers' Perceptions of AI (Van Manen: Lived Body & Lived Time | TPACK: TK → TPK → TPACK)

Teachers' engagement with Artificial Intelligence (AI) did not begin as a neutral or purely rational process. Instead, their initial encounters were marked by strong emotional responses that evolved over time, shaping how AI was ultimately positioned within their pedagogical practice. These emotional trajectories—ranging from fascination and curiosity to anxiety, skepticism, and reflective caution—constitute a critical dimension of teachers' lived experiences with AI.

Several teachers described their first exposure to AI as a moment of excitement and wonder. Teacher A, for instance, referred to AI as “kayak alat ajaib” (like a magical tool), expressing amazement at how quickly lesson materials could be generated. This sense of fascination functioned as an affective catalyst that motivated experimentation and exploration. As Teacher A explained:

“Awalnya saya kagum banget. Kok bisa bikin materi cepat sekali. Dari situ saya jadi pengen coba terus.”

Similarly, Teacher B recalled initial enthusiasm driven by the practical benefits of AI, particularly its ability to generate ideas that would not have emerged through conventional preparation alone:

“Kadang ide dari ChatGPT itu tidak kepikiran sebelumnya. Itu bikin saya penasaran dan pengen belajar lebih jauh.”

Phenomenologically, these experiences reflect lived body as a site of affective awakening (van Manen, 1990). AI was not merely understood cognitively; it was felt as excitement, relief, and renewed energy. From a TPACK perspective, this phase represents the early development of Technological Knowledge (TK), where emotional attraction lowered resistance and enabled initial engagement with new tools (An et al., 2023; Venkatesh & Davis, 2000).

However, not all initial responses were positive. Teacher C described feelings of confusion and insecurity, particularly related to generational gaps and unfamiliar interfaces:

“Awalnya saya bingung dan takut salah, karena saya tidak terbiasa dengan teknologi seperti ini.”

This sense of being “left behind” reflects lived body as vulnerability and anxiety, echoing findings that

emotional readiness significantly influences technology adoption (Khadafi et al., 2024). For Teacher C, learning AI required overcoming embodied discomfort before any pedagogical integration could occur.

Teacher D articulated the strongest emotional resistance. His first encounters with AI were marked by worry and moral unease rather than fascination. Observing students using AI outputs without understanding, he expressed concern that AI would erode critical thinking and character formation:

“Saya khawatir anak-anak jadi malas berpikir. AI itu cepat, tapi tidak mendidik adab.”

This response reflects a second-order barrier (Ertmer & Ottenbreit-Leftwich, 2010), where resistance is rooted not in technical difficulty but in deeply held pedagogical and ethical beliefs. In this case, Pedagogical Knowledge (PK)—particularly the value of “*adab dulu, baru ilmu*”—acted as a filter that constrained the expansion of TK.

Over time, teachers' emotional responses did not remain static. For Teachers A, B, and C, repeated interaction with AI led to a gradual shift from curiosity to reflective and strategic use. Teacher A described AI as becoming a “*teman sehari-hari*”, indicating a transformation in her relationship with technology:

“Sekarang sudah biasa. Bukan kagum lagi, tapi mikir: ini cocoknya dipakai untuk bagian mana.”

Teacher B similarly reported growing confidence as she learned to align AI tools with instructional goals through MGMP discussions and self-practice. Teacher C noted that successful integration enhanced his professional confidence, particularly when AI-assisted materials improved lesson clarity for students. This finding resonates with Luckin et al. (2016), who conceptualize AI as a cognitive partner that should extend, rather than replace, human thinking—an ideal that teachers in this study actively attempted to preserve.

This progression illustrates lived time as professional maturation. Rather than a linear trajectory toward increased use, teachers' perceptions evolved through experience, reflection, and contextual negotiation. Within the TPACK framework, this evolution reflects movement from TK toward TPK and, in some cases, toward integrated TPACK, where technology, pedagogy, and content are deliberately aligned with students' needs and classroom realities (Mishra & Koehler, 2006).

In contrast, Teacher D's perception also evolved—but toward firmer boundaries rather than deeper integration. After witnessing student dependency and superficial learning, he increasingly restricted AI use in the classroom, while occasionally using it privately as a comparison tool. His trajectory demonstrates that professional growth does not always entail greater technological adoption. Instead, pedagogical wisdom may manifest as deliberate limitation when technology is perceived to threaten moral and relational goals. While

studies such as Hazaymeh et al. (2024) suggest that AI may promote learner autonomy, the teachers in this study perceived an opposite tendency, where unregulated AI use risked diminishing students' cognitive engagement.

Analytically, this theme challenges dominant assumptions that successful AI integration necessarily involves expanding use. The findings suggest that mature TPACK is not defined by how much technology is used, but by how wisely it is positioned. Teachers' evolving perceptions reflect a continuous negotiation between efficiency, ethics, and educational values. In the context of the Merdeka Curriculum—which simultaneously promotes innovation and character education—this tension becomes especially pronounced.

Overall, the emotional and temporal evolution of teachers' perceptions reveals that AI integration is fundamentally a human process. Before AI becomes a pedagogical tool, it is first encountered as an emotional experience. How teachers feel about AI—over time—shapes how, when, and whether it is ultimately integrated into their teaching practice. This finding reinforces the need for professional development models that address not only technical skills, but also teachers' emotional readiness, ethical concerns, and reflective judgment.

Balancing AI with Conventional Pedagogy: Hybridization and Pedagogical Restraint (Van Manen: Lived Space & Lived Body | TPACK: PCK & TPK)

The integration of AI in English language teaching at SMPN 1 Mojowarno did not result in full technological immersion. Instead, teachers demonstrated a conscious and strategic effort to balance AI-assisted instruction with conventional pedagogical practices. This balancing act emerged as a practical response to infrastructural constraints, student diversity, and teachers' embodied experiences of satisfaction and frustration during instruction.

Teachers A and C adopted a hybrid pedagogical approach, selectively combining AI tools with traditional methods. Teacher A, for example, used AI-generated materials to support lesson preparation while maintaining direct interaction during classroom activities:

"AI itu membantu saya di persiapan, tapi di kelas saya tetap kombinasikan dengan diskusi langsung dan tugas manual."

Similarly, Teacher C described blending AI feedback with personal explanation to ensure students' comprehension:

"Saya pakai AI untuk bantu, tapi tetap saya jelaskan lagi supaya anak-anak benar-benar paham."

This approach reflects lived space as a negotiated pedagogical environment, where digital and non-digital practices coexist. Rather than viewing technology and tradition as oppositional, teachers treated them as complementary resources, aligned with the Merdeka

Curriculum's emphasis on flexibility and student-centered learning.

In contrast, Teacher B frequently reverted to manual methods when AI-based activities failed to engage all students equally. She highlighted that unequal access to devices and internet connectivity often resulted in passive participation:

"Yang punya HP yang kerja, yang lain cuma diam. Jadi akhirnya saya balik ke cara manual."

Teacher D adopted the most segregative stance, deliberately excluding AI from classroom instruction. For him, conventional teaching was not a fallback option but a principled pedagogical choice rooted in moral and relational considerations:

"Kalau pakai cara manual, saya merasa kelas lebih hidup dan anak-anak lebih fokus."

From a phenomenological perspective, these decisions are deeply embodied. Teachers described feelings of satisfaction and relational fulfillment when human interaction remained central, and frustration when technology disrupted classroom flow. These emotional responses illustrate lived body as an internal compass guiding pedagogical judgment.

Analytically, this theme highlights that balancing AI with conventional pedagogy is not a sign of resistance or indecision, but an expression of contextual pedagogical wisdom. Within the TPACK framework, effective practice emerged at the intersection of Pedagogical Content Knowledge (PCK) and Technological Pedagogical Knowledge (TPK). Teachers continuously evaluated whether AI strengthened or undermined their instructional goals for particular content and student groups.

Importantly, segregation from AI—especially in Teacher D's case—does not indicate a lack of competence. Instead, it reflects a mature form of TPACK in which Pedagogical Knowledge (PK) and contextual values override technological affordances when integration is deemed pedagogically or ethically inappropriate. This finding challenges linear models of technology adoption and reinforces arguments that meaningful integration requires discernment rather than maximal use (Ertmer & Ottenbreit-Leftwich, 2010; Mohamed, 2024).

Overall, the balancing of AI and conventional pedagogy illustrates that effective teaching in rural contexts depends on adaptability rather than technological intensity. Teachers' ability to hybridize or restrain AI use demonstrates reflective agency, ensuring that technology serves pedagogical purposes without compromising equity, relational depth, or moral education.

Social Relations in the Use of AI: Teachers, Students, and Peers (Van Manen: Lived Relation | TPACK: TPK & PK)

The integration of Artificial Intelligence (AI) into English language teaching at SMPN 1 Mojowarno introduced what teachers perceived as a “silent third party” in classroom interaction, subtly reshaping social relations between teachers and students, as well as among colleagues. Teachers’ experiences reveal that AI functioned simultaneously as a relational bridge and a source of relational tension, depending on how it was pedagogically mediated.

For Teachers A, B, and C, AI-supported activities strengthened teacher–student relationships by creating shared emotional experiences. Teacher A described how gamified tools such as Quizizz fostered closeness and engagement:

“Pas pakai Quizizz itu, kelas jadi lebih hidup. Anak-anak ketawa-ketawa, terus cerita hasil kuis mereka ke saya. Jadi lebih dekat.”

Similarly, Teacher B viewed AI as a bridge for personalized support, particularly for students with low confidence. She recalled how Grammarly helped a shy student gain confidence in writing:

“Dia jadi lebih percaya diri karena tahu kesalahannya diperbaiki, dan saya bisa kasih apresiasi.”

Teacher C also observed that AI-enhanced activities encouraged quieter students to participate and share personal stories, especially in recount and narrative tasks:

“Anak-anak jadi lebih terbuka cerita pengalaman mereka. Di situ saya merasa hubungan emosionalnya lebih kuat.”

Phenomenologically, these experiences reflect lived relation as a space of emotional resonance and mutual recognition. AI did not replace interaction; rather, when guided by strong Pedagogical Knowledge (PK), it amplified opportunities for dialogue, affirmation, and shared meaning. Within the TPACK framework, this relational enrichment illustrates Technological Pedagogical Knowledge (TPK) in action—where teachers deliberately selected tools to serve relational goals, not merely instructional efficiency.

However, AI also introduced relational friction. Teacher A felt the need to reaffirm her authority in the classroom:

“AI itu hanya asisten. Saya tetap yang utama di kelas.”

Teacher B encountered mixed reactions from colleagues, with some expressing enthusiasm and others skepticism, prompting cautious experimentation:

“Ada yang mendukung, tapi ada juga yang merasa AI terlalu rumit. Itu bikin saya lebih hati-hati.”

The most pronounced relational tension was experienced by Teacher D, who first became aware of AI through students’ suspiciously polished assignments. He perceived AI as a threat to trust and honesty:

“Tugasnya rapi banget, tapi pas saya tanya, mereka tidak paham artinya. Di situ saya curiga.”

In response, Teacher D banned mobile phones and required students to use dictionaries, a decision that initially caused resistance but ultimately strengthened relational bonds:

“Awalnya mereka protes, tapi setelah saya ajak ngobrol, hubungan malah jadi lebih erat. Mereka tahu saya peduli.”

This response illustrates lived relation as a moral space, where conflict becomes an opportunity for care and guidance. From a pedagogical perspective, Teacher D’s actions represent strong Pedagogical Knowledge (PK) overriding technological convenience. His stance reflects the Javanese educational value of *adab*, where moral formation and respectful relationships take precedence over efficiency.

Analytically, this theme demonstrates that AI integration fundamentally reshapes social relations in the classroom. Within TPACK, teachers’ capacity to manage these relational shifts depends not on Technological Knowledge (TK), but on their ability to exercise ethical judgment, authority, and care. Advanced TPK in this context involves knowing how to use AI to strengthen relationships—and when to restrain it to protect trust. Similar to Alqahtani and Wafula (2024), AI was perceived as supporting pedagogical creativity; however, teachers in this study emphasized selective and context-sensitive use rather than full integration.

Overall, AI’s presence reconfigured classroom relations rather than neutralizing them. Teachers emerged not as passive adopters of technology, but as relational agents who actively negotiated AI’s role to preserve emotional connection, professional authority, and moral integrity. This finding reinforces the view that the success of AI integration lies not in technological sophistication, but in teachers’ relational wisdom and ethical mediation.

While the previous theme illustrates how AI reshapes social relations by acting as both a relational bridge and a source of tension, these relational shifts inevitably place new demands on teachers’ professional roles. As AI enters the classroom as a “third party,” teachers are no longer only facilitators of learning but are compelled to actively regulate, direct, and sometimes restrain technology to preserve trust, authority, and ethical boundaries. The relational dynamics described above thus give rise to a deeper professional challenge: teachers’ transformation into directors and guardians of pedagogical space. This shift foregrounds how AI integration extends beyond interactional change, evolving into a moral and pedagogical responsibility that teachers must shoulder in the absence of clear institutional guidance.

Teachers as Directors and Guardians of Pedagogical Space (*Van Manen: Lived Relation / TPACK: TPK*)

One of the most critical challenges emerging from teachers' experiences with AI integration is the transformation of their professional role. Rather than becoming passive users of intelligent tools, teachers at SMPN 1 Mojowarno felt compelled to assume dual roles as directors and guardians of classroom interaction. These roles were not freely chosen strategies, but defensive responses to the ethical, pedagogical, and relational risks posed by AI.

Teachers consistently emphasized that AI must remain subordinate to teacher authority. Teacher A explicitly positioned herself as the primary decision-maker:

"AI itu hanya asisten. Guru tetap pilot utama di kelas."

Similarly, Teacher C stressed the need for strict guidance and clear instructions when AI was involved:

"Guru harus tetap jadi pengarah utama. Kalau tidak dikontrol, anak-anak bisa salah arah."

These statements reflect lived relation as a space of responsibility and authority. Teachers experienced a moral obligation to actively orchestrate human-AI interactions so that efficiency did not replace understanding. Within the TPACK framework, this illustrates advanced Technological Pedagogical Knowledge (TPK), where technology use is constantly filtered through pedagogical judgment rather than applied automatically.

Beyond directing learning activities, teachers also experienced the burden of acting as ethical guardians. Teacher B described how she had to intervene when students relied uncritically on AI-generated answers:

"Waktu anak-anak pakai ChatGPT dan hasilnya malah bingung sendiri, saya harus masuk dan jelaskan. Guru harus mengarahkan, bukan cuma membiarkan."

This ethical vigilance aligns with concerns raised in prior studies regarding student dependency and superficial learning when AI is used without guidance (Luckin et al., 2016; Mohamed, 2024; Tomczyk & Majkut, 2025). Teachers were not merely teaching content, but actively protecting the learning process itself.

The most pronounced guardian role was embodied by Teacher D, who chose to exclude AI entirely from classroom learning. His decision was grounded in a strong moral philosophy emphasizing character formation:

"AI tidak bisa mengajarkan adab. Kalau hanya mesin, anak-anak tidak belajar makna." - "Saya lebih percaya cara manual. Anak-anak harus berpikir sendiri."

From a phenomenological perspective, this stance represents lived relation as moral defense. Teacher D's rejection of AI was not technological incompetence, but a deliberate pedagogical choice rooted in cultural values.

His principle of "adab dulu, baru ilmu" positioned moral and relational education as non-negotiable, especially in a rural context with zonasi students.

Analytically, this theme reveals a critical paradox within TPACK. While many models assume that higher competence leads to increased technology use, the findings show that mature TPACK may instead manifest as strategic limitation or rejection of technology. This aligns with Ertmer's (2010) notion of second-order barriers, where deeply held pedagogical beliefs shape technology decisions more strongly than technical skills.

In the absence of clear institutional guidelines or ethical frameworks for AI use, the responsibility for safeguarding pedagogical integrity fell almost entirely on individual teachers. Acting as directors and guardians, they bore the cognitive and emotional load of ensuring that AI served learning rather than undermined it.

Overall, this theme demonstrates that AI integration is not merely a technical challenge but a profound professional and ethical one. Teachers' agency was expressed not through enthusiastic adoption, but through careful control, restriction, and moral judgment. In the context of SMPN 1 Mojowarno, the true measure of professionalism in the AI era lay in teachers' capacity to direct technology when it served pedagogy—and to guard against it when it threatened human values.

Infrastructure, Training, and Contextual Constraints in AI Integration (*Van Manen: Lived Space & Lived Time / TPACK: TK, TPK & TCK*)

Despite teachers' pedagogical willingness to explore AI, the integration process at SMPN 1 Mojowarno was fundamentally constrained by infrastructural limitations, insufficient professional training, and contextual misalignment between AI tools and local realities. These challenges shaped teachers' lived space and lived time, positioning AI integration as a continuous negotiation rather than a seamless innovation. This aligns with Zhai's (2024) argument that teachers in the AI era increasingly function as learning designers, although the present findings show that such roles often emerge as a burden rather than a freely chosen agency.

From the perspective of lived space, teachers consistently described the school's physical and digital infrastructure as fragile and unreliable. Although basic facilities such as Wi-Fi and computer labs were available, they were often impractical for classroom use. Teacher A explained:

"Lab komputer jarang dipakai, karena jauh dari kelas dan listriknya kadang bermasalah."

Similarly, Teacher C recounted how unstable internet connectivity disrupted lesson plans:

"Pernah mau pakai ChatGPT atau Canva, tapi internet tiba-tiba lelet. Akhirnya balik ke cara manual."

These infrastructural breakdowns transformed the classroom into a fractured learning space, where digital plans were frequently abandoned in favor of conventional methods. Phenomenologically, this produced emotional responses of frustration and fatigue, reflecting how lived body and lived space intersect when pedagogical intentions are repeatedly interrupted by material constraints.

Economic limitations further intensified these challenges. Teachers noted the absence of institutional funding for premium AI tools, forcing reliance on free versions with limited functionality. Teacher D stated:

“Sekolah tidak menyediakan dana untuk AI berbayar. Jadi kalau pakai, ya yang gratis saja.”

Within the TPACK framework, such conditions restricted the development of Technological Knowledge (TK), not because teachers lacked interest, but because consistent access to functional tools was unavailable. As a result, teachers developed what may be described as survival-oriented TK—knowledge focused on workarounds rather than innovation.

Challenges related to lived time emerged most clearly in teachers’ experiences of professional training. Formal training opportunities were perceived as superficial, short-term, and disconnected from classroom realities. Teacher A described official workshops as merely introductory:

“Pelatihannya cuma sekilas, jadi akhirnya belajar sendiri di rumah.”

Teacher B echoed this concern, emphasizing the lack of time for meaningful practice:

“Belum sempat mendalami satu aplikasi, materinya sudah ganti.”

These experiences positioned teachers in a temporal state of isolation, where rapid technological change outpaced institutional support. Teachers were compelled to engage in self-directed learning outside working hours, extending their professional labor into personal time. This aligns with prior findings that highlight the emotional burden of insufficient training in technology integration (Sibarani et al., 2025). Additionally, this finding resonates with (Pan & Wang, 2025), who report that experienced teachers often struggle with confidence when engaging with unfamiliar AI technologies.

Contextual misalignment further complicated AI use, particularly in relation to cultural relevance and student readiness. Teachers A, B, and C reported that AI-generated content was often linguistically complex or culturally distant, requiring substantial modification. Teacher B noted:

“Kalau terlalu mengandalkan ChatGPT, bahasanya sering terlalu sulit untuk anak-anak.”

Teacher D expressed the strongest resistance, rejecting AI content that conflicted with local moral values:

“Bahasanya kebarat-baratan dan tidak sesuai adab.”

These experiences illustrate lived space as a cultural space, where global AI outputs collide with local values rooted in Javanese educational traditions. Within TPACK, this challenge foregrounds Technological Content Knowledge (TCK), as teachers were required to filter, simplify, or reject AI-generated materials to preserve pedagogical and cultural integrity. This supports arguments from (Alnasib, 2023; Chuyen & Vinh, 2025; Dangwal, 2024) that AI integration must be context-sensitive rather than standardized across diverse educational settings.

Analytically, this theme reveals that the primary obstacles to AI integration were not teacher resistance, but systemic silence—manifested through weak infrastructure, inadequate training models, and a lack of context-sensitive support. Teachers’ adaptive strategies, such as reverting to manual methods or using personal devices, reflect resilience but also expose the inequity of relying on individual effort to compensate for institutional shortcomings.

Overall, Theme 6 demonstrates that AI integration in rural education unfolds within a constrained ecology of space and time. Without foundational infrastructure, sustained training, and culturally responsive tools, the promise of AI remains largely aspirational. In this context, teachers’ professional agency was expressed not through technological experimentation alone, but through ethical restraint, contextual adaptation, and persistent commitment to equitable learning—highlighting that meaningful AI integration depends as much on systemic readiness as on individual pedagogical wisdom.

Taken together, the findings reveal that the integration of Artificial Intelligence (AI) in English language teaching at SMPN 1 Mojowarno is neither a purely technical endeavor nor a uniformly progressive process. Instead, it emerges as a deeply human, contextual, and value-laden practice shaped by teachers’ lived experiences across time, space, body, and social relations. While AI enabled pedagogical efficiency, creativity, and renewed professional energy, its implementation was continuously negotiated through ethical concerns, cultural values, infrastructural constraints, and unequal student readiness. Teachers did not merely adopt AI; they interpreted, filtered, adapted, and at times deliberately restrained its use to preserve pedagogical integrity, relational depth, and local moral principles such as *adab*.

From a TPACK perspective, these findings challenge linear assumptions of technology integration by demonstrating that pedagogical wisdom and contextual knowledge often precede or override technological expansion. Ultimately, the study positions teachers as reflective mediators and ethical decision-makers whose agency determines whether AI functions as a supportive

pedagogical partner or a disruptive force. In rural educational contexts, meaningful AI integration therefore depends not on the sophistication of tools alone, but on teachers' capacity to humanize technology within the lived realities of their classrooms.

CONCLUSION

This study explored English teachers' lived experiences of integrating Artificial Intelligence (AI) in English language teaching at a rural junior high school in Indonesia. Guided by hermeneutic phenomenology and analytically framed through the Technological Pedagogical Content Knowledge (TPACK) framework, the findings reveal that AI integration is neither a uniform nor a purely technical process. Instead, it is a deeply contextual, value-laden, and relational practice shaped by teachers' pedagogical beliefs, emotional responses, cultural norms, and material realities.

The findings demonstrate that AI offers tangible pedagogical benefits, particularly in enhancing instructional efficiency and supporting creative lesson design. Teachers experienced a transformation of lived time and lived body, as AI reduced workload pressures and enabled greater pedagogical presence. However, these benefits were accompanied by profound concerns regarding student dependency, superficial learning, ethical risks, and the erosion of meaningful teacher-student relationships. Such tensions highlight that the impact of AI cannot be separated from its influence on the human and moral dimensions of teaching.

Importantly, this study shows that teachers' engagement with AI does not follow a linear progression toward greater technological adoption. Within the TPACK framework, professional maturity was often expressed through reflective judgment—manifesting in selective use, strict regulation, or even principled rejection of AI when it conflicted with pedagogical integrity, cultural values, or equity concerns. In this sense, not using AI emerged as a legitimate and sophisticated form of pedagogical wisdom rather than resistance to innovation.

Situated in the rural context of SMPN 1 Mojowarno, the study further reveals how AI integration is continuously negotiated within lived space shaped by infrastructural limitations and local values, particularly the Javanese principle of *adab*. Teachers acted as cultural and ethical mediators, ensuring that global AI technologies did not override local educational purposes. In the absence of clear institutional guidance and adequate systemic support, teachers were compelled to assume dual roles as directors and guardians—carefully orchestrating or restraining AI use to protect humanistic and relational aspects of learning.

Overall, this study affirms that the success of AI integration in English language teaching depends less on technological sophistication than on teachers' reflective capacity, ethical discernment, and contextual sensitivity. In rural and culturally grounded settings, AI integration must be understood as a human-centered pedagogical endeavor, where teachers remain the decisive agents who determine when technology serves learning—and when pedagogy must take precedence over automation.

Despite the depth of insights generated, this study is not without limitations. As a hermeneutic phenomenological inquiry involving four English teachers from a single rural junior high school, the findings are context-specific and not intended for statistical generalization. Data were primarily derived from self-reported interviews, which may not fully capture the complexity of classroom practices or longitudinal changes in AI use. Nevertheless, the study offers transferable insights for educators working in similar sociocultural and infrastructural contexts. Future research may extend this work through longitudinal or mixed-methods designs to examine how teachers' pedagogical judgments evolve alongside institutional support and technological development.

Further studies could also incorporate students' perspectives or explore school leadership roles in mediating ethical and contextual AI integration. Practically, the findings suggest that AI-related professional development should move beyond tool-based training toward reflective, context-sensitive models that empower teachers to exercise pedagogical and ethical discernment. Such an approach is essential to ensure that AI serves not only instructional efficiency but also the humanistic and cultural foundations of education, particularly in rural and value-rich contexts.

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